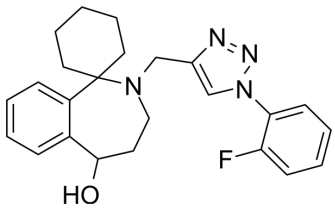
PARP1-IN-17

Cat. No.:	HY-157137
Molecular Formula:	$C_{24}H_{27}FN_4O$
Molecular Weight:	406.5
Target:	PARP; Caspase; Apoptosis
Pathway:	Cell Cycle/DNA Damage; Epigenetics; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PARP1-IN-17 is a PARP-1 inhibitor (IC_{50} = 19.24 nM for PARP-1 and = 32.58 nM for PARP-2) and induce apoptosis. PARP1-IN-17 shows excellent anti-proliferative activity[1].

IC_{50} & Target	PARP-1	Caspase 3

In Vitro

PARP1-IN-17 (Compound 11b) (72 h) exhibits anti-proliferative effects in A549 cells, OVCAR-3 cells, HCT-116 cells and MCF-7 cells [1].

PARP1-IN-17 (1-4 μM, 48 h) can reduce the biosynthesis of PAR induce apoptosis in A549 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

Cell Line:	A549 cells, OVCAR-3 cells, HCT-116 cells, MCF-7 cells
Concentration:	
Incubation Time:	72 h
Result:	Had excellent anti-proliferative activity against A549 cell, OVCAR-3 cells, HCT-116 cells and MCF-7 cells (IC_{50}=1.95 ± 0.33 μM, 4.02 ± 0.24 μM, 7.45 ± 1.98 μM and 9.21 ± 2.54 μM).

Apoptosis Analysis[1]

Cell Line:	A549 cells
Concentration:	1 μM, 2 μM, 4 μM
Incubation Time:	48 h
Result:	Induced apoptosis in cancer cells and increased the apoptosis rates of A549 cells in a dose-dependent manner.

Western Blot Analysis[1]

Cell Line:	A549 cells, OVCAR-3 cells, HCT-116 cells, MCF-7 cells

Concentration:	1 μM, 2 μM, 4 μM
Incubation Time:	
Result:	Reduced the biosynthesis of PAR, and had the best effect at 4.0 μM. Decreased the expression of Caspase 3.

REFERENCES

[1]. Yu L, et al. Discovery of novel 2, 3, 4, 5-tetrahydrospiro [benzo [c] azepine-1, 1'-cyclohexan]-5-ol derivatives as PARP-1 inhibitors [J]. BMC chemistry, 2023, 17(1): 147.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA